

REMARKS

A check for \$2950 for the fees for filing of an RCE (\$790) and for the fee for a five-month extension of time (\$2160) accompanies this response. Any fees that may be due in connection with this application during its pendency may be charged to Deposit Account No. 06-1050. If a Petition for extension of time is needed, this paper is to be considered such Petition.

Claims 1-17, 23-26, 30-52, 55 and 57-63 and 98-107 are pending. Claims 18-22, 27-29, 53, 54 and 56 are cancelled herein without prejudice or disclaimer. Claims 64-97, which have been deemed withdrawn, are cancelled herein without prejudice or disclaimer. Applicant expressly reserves the right to file divisional application(s) to the subject matter of the cancelled claims. Claims 1, 2, 4-9, 10, 12, 14, 23-26, 30-38, 40-42, 44-48, 50, 52, 55 and 57-63 are amended. Claims 98-107 are added herein.

Claims 1, 2, 4, 5, 36, 42 and 47 are amended herein to more distinctly claim the subject matter. Basis for the amendment can be found throughout the specification and claims as originally filed (for example, see page 10, lines 7-17).

Claims 1, 2, 6, 7, 9, 10, 23-26, 30-38, 42, 44-48, 55 and 57-62 are amended to replace the recitation "may be optionally" with the recitation "is optionally" or "are optionally" as appropriate in order to more distinctly claim the subject matter. Claims 12 and 52 are amended to recite "Y is O or S" to more distinctly claim the subject matter, basis for which is found throughout the specification and claims as originally filed (for example, see page 23, column 2, row 7). Claims 14 and 50 are amended to more distinctly claim the subject matter, basis for which is found throughout the specification (for example, see page 21, row 4). Claims 40, 60 and 63 are amended to correct minor formatting or typographical errors. No new matter is added.

Basis for added claim 98 can be found throughout the specification as filed (for example, original claim 1; see also page 2, line 15 through page 7, line 1). Basis for added claims 99, 100, 101, 102, 103, 104, 105, 106 and 107 can be found throughout the specification and claims as originally filed (for example, see original claims 43, 44, 48, 50, 52, 55, 57, 58 and 59, respectively).

No new matter is added.

Response to Examiner's Arguments in the Advisory Action

The Examiner alleges that claims 12, 13 and 52 are directed to compounds outside of the elected species formulae (I)-(IV). Applicant respectfully submits that pending claims 12,

13 and 52 read on the elected species. For example, claims 12 and 52 are directed to an embodiment where Y is O or S, and claim 13 is directed to an embodiment where Y is O. The elected species, represented by Structure 15 of Scheme II, has an oxygen at the Y position. Thus, claims 12, 13 and 52 read on the elected species. Applicant respectfully requests that claims 12, 13 and 52 be rejoined with the elected group.

THE REJECTION OF CLAIMS 18, 20, 21, 27, 53 AND 56 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 18, 20, 21, 27, 53 and 56 are rejected as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter. The Examiner alleges that there is no antecedent basis in base claim 1 or 42 for the recitation "Z is O."

Applicant respectfully submits that none of claims 21, 27 or 56 includes the recitation "Z is O." Thus, the rejection of claims 21, 27 and 56 is without merit. Claims 18, 20 and 53 are cancelled herein rendering the rejection of these claims moot.

THE OBJECTION TO CLAIMS 19, 22 AND 28 UNDER 37 C.F.R. 1.75

Claims 19, 22 and 28 are objected to under 37 C.F.R. 1.75 as allegedly being a substantial duplicate of claim 1 because the limitations as set forth in claims 19, 22 and 28 do not further limit the base claim. Applicant respectfully submits that the objection is moot in light of the cancellation of claims 19, 22 and 28 herein.

THE REJECTION OF CLAIMS 1, 2, 4-11, 14-19 and 21-39 UNDER 35 U.S.C. §102(b)

Claims 1, 2, 4-11, 14-19 and 21-39 are rejected under 35 U.S.C. § 102(b) as anticipated by Yamashkin *et al.* (Chemistry of Heterocyclic Compounds) because Yamashkin *et al.* allegedly discloses in RN 243669-00-3, 243669-02-5, 243669-04-7 and 243669-06-9 compounds encompassed by the claimed subject matter where R² is CH₃.

This rejection is respectfully traversed. Applicant respectfully submits that claims 18, 19, 21, 22 and 27-29 are cancelled herein without prejudice or disclaimer. Thus, the rejection as applied to these claims is moot.

RELEVANT LAW

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *In re Spada*, 15 USPQ2d 1655 (Fed. Cir, 1990), *In re Bond*, 15 USPQ 1566 (Fed. Cir. 1990), *Soundscriber Corp. v. U.S.*, 360 F.2d 954, 148 USPQ 298, 301, adopted 149 USPQ 640 (Ct. Cl.) 1966. *See, also, Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.), *cert. denied*, 110 S.Ct. 154 (1989).

The mere naming a compound in a reference without more cannot constitute a description of the compound. To hold otherwise, "lists of thousands of theoretically possible compounds could be generated and published, which assuming it would be within the level of skill in art to make them, would bar a patent to the actual discoverer of a named compound no matter how beneficial to mankind it might be." Listing of specific compounds with nothing more is mere speculation about their potential or theoretical existence and thus not a description within the meaning of 102. *In re Wiggins* 488 F.2d 538, 179 USPQ 421, 425 (CCPA 1973).

THE CLAIMS

Claim 1 is directed to a compound of formula (I) – (VIII) where

R¹ is selected from among hydrogen, F, Cl, Br, I, NO₂, OR¹², SR¹², SOR¹², SO₂R¹², NR¹²R¹², C₁-C₈ alkyl, C₁-C₈ haloalkyl and C₁-C₈ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

R² is selected from among F, Cl, Br, I, CF₃, CHF₂, CH₂F, CF₂Cl, CN, CF₂OR¹², CH₂OR, OR¹², SR¹², SOR¹², SO₂R¹², NR¹²R¹³, substituted C₁-C₈ alkyl, C₁-C₈ haloalkyl, C₁-C₈ heteroalkyl, C₂-C₈ alkenyl and C₂-C₈ alkynyl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted;

R³ through R⁸ each independently is selected from among hydrogen, F, Cl, Br, I, OR¹², NR¹²R¹³, SR¹², SOR¹², SO₂R¹², C₁-C₈ alkyl, C₁-C₈ haloalkyl, C₁-C₈ heteroalkyl, C₂-C₈ alkynyl, C₂-C₈ alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or

R³ and R⁵ taken together form a bond; or

R⁵ and R⁷ taken together form a bond; or

R⁴ and R⁶ taken together form a three- to eight-membered saturated or unsaturated carbocyclic or heterocyclic ring, wherein the carbocyclic or heterocyclic ring is optionally substituted; or

R⁶ and R⁸ taken together form a three- to eight-membered saturated or unsaturated carbocyclic or heterocyclic ring, wherein the carbocyclic or heterocyclic ring is optionally substituted;

R⁹ and R¹⁰ each independently is selected from among hydrogen, F, Cl, Br, I, CN, OR¹², NR¹²R¹³, C_m(R¹²)_{2m}OR¹³, SR¹², SOR¹², SO₂R¹², NR¹²C(O)R¹³, C₁-C₈ alkyl, C₁-C₈ haloalkyl,

C₁-C₈ heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted;

R¹¹ is selected from among F, Br, Cl, I, CN, OR¹⁴, NR¹⁴R¹³, and SR¹⁴;

R¹² and R¹³ each independently is selected from the group of hydrogen, C₁-C₈ alkyl, C₁-C₈ haloalkyl, C₁-C₈ heteroalkyl, C₂-C₈ alkenyl, C₂-C₈ alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted;

R¹⁴ is selected from among hydrogen, C₁-C₈ alkyl, C₁-C₈ haloalkyl, C₁-C₈ heteroalkyl, aryl, heteroaryl, C(O)R¹⁵, CO₂R¹⁵ and C(O)NR¹⁵R¹⁶, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted;

R¹⁵ and R¹⁶ each independently is selected from among hydrogen, C₁-C₈ alkyl, C₁-C₈ haloalkyl, C₁-C₈ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted;

W is O or S; X is N{R¹⁴}; Y is selected from among O, S, N{R¹²} and NO{R¹²}; Z is N{R¹²}; n is 0; and m is 0 or 1; or a pharmaceutically acceptable salt thereof.

Claims 2, 4-11, 14-19 and 21-39 ultimately depend from claim 1.

DIFFERENCES BETWEEN THE CLAIMED SUBJECT MATTER AND THE DISCLOSURE OF YAMASHKIN *ET AL.*

In order to be an effective anticipatory reference, the reference must be enabling (must teach how to make and use the product). Applicant respectfully submits that Yamashkin *et al.* is an abstract that merely sets forth the compounds. The provided reference does not disclose a use for the compounds or methods to make the compounds. Thus, Yamashkin *et al.* does not anticipate the claims as filed or as pending.

Notwithstanding, in order to expedite prosecution, but without acquiescing to the rejection, claims 1, 2, 4, 5 and 36 are amended herein. Pending claims 1, 2, 4, 5 and 36 include compounds where R² is a substituted C₁-C₈ alkyl group. Yamashkin *et al.* does not disclose compounds where R² is a substituted C₁-C₈ alkyl group. Thus, the compounds encompassed by pending claims 1, 2, 4, 5 and 36 are not anticipated by Yamashkin *et al.* Claims 2, 4-11, 14-19 and 21-39 ultimately depend from claim 1. Hence, Yamashkin *et al.* does not anticipate any of claims 1, 2, 4-11, 14-17, 23-26 and 30-39. Applicant respectfully requests that the rejection be reconsidered and withdrawn.

THE REJECTION OF CLAIMS 1, 2, 4-11, 14-19 and 21-39 UNDER 35 U.S.C. §102(b)

Claims 1, 2, 4-11, 14-19 and 21-39 are rejected under 35 U.S.C. § 102(b) as anticipated by El-Desoky *et al.* (Zeitschrift fuer Naturforschung) because the compound with the RN 216073-29-9 in El-Desoky *et al.* allegedly is encompassed by the claimed subject matter where R² is hydrogen.

This rejection is respectfully traversed. Applicant respectfully submits that claims 18, 19, 21, 22 and 27-29 are cancelled herein without prejudice or disclaimer. Thus, the rejection as applied to these claims is moot.

RELEVANT LAW

See related section above.

THE CLAIMS

See related section above.

DIFFERENCES BETWEEN THE CLAIMED SUBJECT MATTER AND THE DISCLOSURE OF EL-DESOKY *ET AL.*

As discussed above, in order to be an effective anticipatory reference, the reference must be enabling (must teach how to make and use the product). Applicant respectfully submits that El-Desoky *et al.* is an abstract that merely sets forth the compounds. The provided reference does not disclose a use for the compounds or methods to make the compounds. Thus, El-Desoky *et al.* does not anticipate the original or pending claims.

Notwithstanding, in order to expedite prosecution, but without acquiescing to the rejection, claims 1, 2, 4, 5 and 36 are amended herein. Pending claims 1, 2, 4, 5 and 36 do not encompass compounds where R² is hydrogen. The compounds disclosed by El-Desoky *et al.* have a hydrogen at the position corresponding to R² of the instant claims. Thus, the compounds disclosed by El-Desoky *et al.* do not anticipate the compounds encompassed by pending claims 1, 2, 4, 5 and 36. Claims 2, 4-11, 14-19 and 21-39 ultimately depend from claim 1. Hence, El-Desoky *et al.* does not anticipate any of claims 1, 2, 4-11, 14-17, 23-26 and 30-39. Applicant respectfully requests that the rejection be reconsidered and withdrawn.

THE REJECTION OF CLAIMS 1, 2, 4-11, 14-19 and 21-39 UNDER 35 U.S.C. §102(b)

Claims 1, 2, 4-11, 14-19 and 21-39 are rejected under 35 U.S.C. § 102(b) as anticipated by Majmudar *et al.* (Journal of Chemical Research, Synopses) because Majmudar *et al.* allegedly discloses compounds encompassed by the claimed subject matter where R² is hydrogen.

This rejection is respectfully traversed. Applicant respectfully submits that claims 18, 19, 21, 22 and 27-29 are cancelled herein without prejudice or disclaimer. Thus, the rejection as applied to these claims is moot.

RELEVANT LAW

See related section above.

THE CLAIMS

See related section above.

DIFFERENCES BETWEEN THE CLAIMED SUBJECT MATTER AND THE DISCLOSURE OF MAJMUDAR *ET AL.*

As discussed above, in order to be an effective anticipatory reference, the reference must be enabling (must teach how to make and use the product). Applicant respectfully submits that Majmudar *et al.* is an abstract that merely sets forth the compounds. The provided reference does not disclose a use for the compounds or methods to make the compounds. Thus, Majmudar *et al.* does not anticipate the original or pending claims.

Notwithstanding, in order to expedite prosecution, but without acquiescing to the rejection, claims 1, 2, 4, 5 and 36 are amended herein. Pending claims 1, 2, 4, 5 and 36 do not encompass compounds where R² is hydrogen. The compounds disclosed by Majmudar *et al.* have a hydrogen at the position corresponding to R² of the instant claims. Thus, the compounds disclosed by Majmudar *et al.* do not anticipate the compounds encompassed by pending claims 1, 2, 4, 5 and 36. Claims 2, 4-11, 14-19 and 21-39 ultimately depend from claim 1. Hence, Majmudar *et al.* does not anticipate any of claims 1, 2, 4-11, 14-17, 23-26 and 30-39. Applicant respectfully requests that the rejection be reconsidered and withdrawn.

THE REJECTION OF CLAIMS 1, 2, 4-11, 14-19 and 21-39 UNDER 35 U.S.C. §102(b)

Claims 1, 2, 4-11, 14-19 and 21-39 are rejected under 35 U.S.C. § 102(b) as anticipated by Yamashkin *et al.* (Khimiya Geterotsiklicheskikh Soedinenii) because Yamashkin *et al.* allegedly discloses in RN 86269-88-7 and 86269-91-2 compounds encompassed by the claimed subject matter where R² is CH₃.

This rejection is respectfully traversed. Applicant respectfully submits that claims 18, 19, 21, 22 and 27-29 are cancelled herein without prejudice or disclaimer. Thus, the rejection as applied to these claims is moot.

RELEVANT LAW

See related section above.

THE CLAIMS

See related section above.

DIFFERENCES BETWEEN THE CLAIMED SUBJECT MATTER AND THE DISCLOSURE OF YAMASHKIN *ET AL.*

As discussed above, in order to be an effective anticipatory reference, the reference must be enabling (must teach how to make and use the product). Applicant respectfully submits that Yamashkin *et al.* an abstract that merely sets forth the compounds. The provided reference does not disclose a use for the compounds or methods to make the compounds. Thus, Yamashkin *et al.* does not anticipate the original or pending claims.

Notwithstanding, in order to expedite prosecution, but without acquiescing to the rejection, claims 1, 2, 4, 5 and 36 are amended herein. Pending claims 1, 2, 4, 5 and 36 include compounds where R² is a substituted C₁-C₈ alkyl group. Yamashkin *et al.* does not disclose compounds where R² is a substituted C₁-C₈ alkyl group. Thus, the compounds encompassed by pending claims 1, 2, 4, 5 and 36 are not anticipated by Yamashkin *et al.* Claims 2, 4-11, 14-19 and 21-39 ultimately depend from claim 1. Hence, Yamashkin *et al.* does not anticipate any of claims 1, 2, 4-11, 14-17, 23-26 and 30-39. Applicant respectfully requests that the rejection be reconsidered and withdrawn.

THE REJECTION OF CLAIMS 1, 2, 4-11, 14-19 and 21-39 UNDER 35 U.S.C. §102(b)

Claims 1, 2, 4-11, 14-19 and 21-39 are rejected under 35 U.S.C. § 102(b) as anticipated by Akhvlediani *et al.* (Zhurnal Organicheskoi Khimii) because Akhvlediani *et al.* allegedly discloses compounds with the RN 80077-05-0 and 80104-38-7 which allegedly are encompassed by the claimed subject matter where R² is hydrogen.

This rejection is respectfully traversed. Applicant respectfully submits that claims 18, 19, 21, 22 and 27-29 are cancelled herein without prejudice or disclaimer. Thus, the rejection as applied to these claims is moot.

RELEVANT LAW

See related section above.

THE CLAIMS

See related section above.

DIFFERENCES BETWEEN THE CLAIMED SUBJECT MATTER AND THE DISCLOSURE OF AKHVLEDIANI *ET AL.*

As discussed above, in order to be an effective anticipatory reference, the reference must be enabling (must teach how to make and use the product). Applicant respectfully submits that Akhvlediani *et al.* is an abstract that merely sets forth the compounds. The

provided reference does not disclose a use for the compounds or methods to make the compounds. Thus, Akhvlediani *et al.* does not anticipate the original or pending claims.

Notwithstanding, in order to expedite prosecution, but without acquiescing to the rejection, claims 1, 2, 4, 5 and 36 are amended herein. Pending claims 1, 2, 4, 5 and 36 do not encompass compounds where R² is hydrogen, and thus are not anticipated by Akhvlediani *et al.* Claims 2, 4-11, 14-19 and 21-39 ultimately depend from claim 1. Thus, Akhvlediani *et al.* does not anticipate any of claims 1, 2, 4-11, 14-17, 23-26 and 30-39. Applicant respectfully requests that the rejection be reconsidered and withdrawn.

THE REJECTION OF CLAIMS 1-11, 14-19, 21-38, 42-51 and 53-62 UNDER 35 U.S.C. §103(a)

Claims 1-11, 14-19, 21-38, 42-51 and 53-62 are rejected under 35 U.S.C. §103(a) as being unpatentable over Adams (WO 00/12502), because Adams allegedly teaches a pyrroloquinoline compound for treating obesity having a hydrogen-substituted alkyl on the pyrrolo nitrogen and teaches that hydrogen, halogen, alkoxy, aryloxy and alkylthio are optional choices. The Examiner alleges that one of ordinary skill in the art would have been motivated at the time of application to replace the hydrogen with the alternative halogen, alkoxy, aryloxy or alkylthio groups to arrive at the instantly claimed subject matter.

RELEVANT LAW

In order to set forth a prima facie case of obviousness under 35 U.S.C. §103: (1) there must be some teaching, suggestion or incentive supporting the combination of cited references to produce the claimed invention (*ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 329, 933 (Fed. Cir. 1984)) and (2) the combination of the cited references must actually teach or suggest the claimed invention. Further, that which is within the capabilities of one skilled in the art is not synonymous with that which is obvious. *Ex parte Gerlach*, 212 USPQ 471 (Bd. APP. 1980). Obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981), but it cannot be established by combining the teachings of the prior art to produce the claimed subject matter, absent some teaching or suggestion supporting the combination (*ACS Hosp. Systems, Inc. v. Montefiore Hosp.* 732 F.2d 1572, 1577. 221 USPQ 329, 933 (Fed. Cir. 1984)). "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim

to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher" *W.L. Gore & Associates, Inc. v. Garlock Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983).

THE CLAIMS

Claim 1 is directed to a compound of formula (I) – (VIII) where R^1 is selected from among hydrogen, F, Cl, Br, I, NO_2 , OR^{12} , SR^{12} , SOR^{12} , SO_2R^{12} , $\text{NR}^{12}\text{R}^{12}$, $\text{C}_1\text{-C}_8$ alkyl, $\text{C}_1\text{-C}_8$ haloalkyl and $\text{C}_1\text{-C}_8$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; R^2 is selected from among F, Cl, Br, I, CF_3 , CHF_2 , CH_2F , CF_2Cl , CN, $\text{CF}_2\text{OR}^{12}$, CH_2OR , OR^{12} , SR^{12} , SOR^{12} , SO_2R^{12} , $\text{NR}^{12}\text{R}^{13}$, substituted $\text{C}_1\text{-C}_8$ alkyl, $\text{C}_1\text{-C}_8$ haloalkyl, $\text{C}_1\text{-C}_8$ heteroalkyl, $\text{C}_2\text{-C}_8$ alkenyl and $\text{C}_2\text{-C}_8$ alkynyl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted; R^3 through R^8 each independently is selected from among hydrogen, F, Cl, Br, I, OR^{12} , $\text{NR}^{12}\text{R}^{13}$, SR^{12} , SOR^{12} , SO_2R^{12} , $\text{C}_1\text{-C}_8$ alkyl, $\text{C}_1\text{-C}_8$ haloalkyl, $\text{C}_1\text{-C}_8$ heteroalkyl, $\text{C}_2\text{-C}_8$ alkynyl, $\text{C}_2\text{-C}_8$ alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or R^3 and R^5 taken together form a bond; or R^5 and R^7 taken together form a bond; or R^4 and R^6 taken together form a three- to eight-membered saturated or unsaturated carbocyclic or heterocyclic ring, wherein the carbocyclic or heterocyclic ring is optionally substituted; or R^6 and R^8 taken together form a three- to eight-membered saturated or unsaturated carbocyclic or heterocyclic ring, wherein the carbocyclic or heterocyclic ring is optionally substituted; R^9 and R^{10} each independently is selected from among hydrogen, F, Cl, Br, I, CN, OR^{12} , $\text{NR}^{12}\text{R}^{13}$, $\text{C}_m(\text{R}^{12})_{2m}\text{OR}^{13}$, SR^{12} , SOR^{12} , SO_2R^{12} , $\text{NR}^{12}\text{C}(\text{O})\text{R}^{13}$, $\text{C}_1\text{-C}_8$ alkyl, $\text{C}_1\text{-C}_8$ haloalkyl, $\text{C}_1\text{-C}_8$ heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted; R^{11} is selected from among F, Br, Cl, I, CN, OR^{14} , $\text{NR}^{14}\text{R}^{13}$, and SR^{14} ; R^{12} and R^{13} each independently is selected from the group of hydrogen, $\text{C}_1\text{-C}_8$ alkyl, $\text{C}_1\text{-C}_8$ haloalkyl, $\text{C}_1\text{-C}_8$ heteroalkyl, $\text{C}_2\text{-C}_8$ alkenyl, $\text{C}_2\text{-C}_8$ alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted; R^{14} is selected from among hydrogen, $\text{C}_1\text{-C}_8$ alkyl, $\text{C}_1\text{-C}_8$ haloalkyl, $\text{C}_1\text{-C}_8$ heteroalkyl, aryl, heteroaryl, $\text{C}(\text{O})\text{R}^{15}$, CO_2R^{15} and $\text{C}(\text{O})\text{NR}^{15}\text{R}^{16}$, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted; R^{15} and R^{16} each independently is selected from among hydrogen, $\text{C}_1\text{-C}_8$ alkyl, $\text{C}_1\text{-C}_8$ haloalkyl, $\text{C}_1\text{-C}_8$ heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; W is O or S; X is $\text{N}\{\text{R}^{14}\}$; Y is selected from among O, S, $\text{N}\{\text{R}^{12}\}$ and $\text{NO}\{\text{R}^{12}\}$; Z is $\text{N}\{\text{R}^{12}\}$; n is 0; and m is 0 or 1; or a

pharmaceutically acceptable salt thereof. Claims 2, 4-11, 14-19 and 21-39 ultimately depend from claim 1 and are directed to various embodiments thereof.

Claim 42 is directed to a pharmaceutical composition including a pharmaceutically acceptable carrier and a compound of formula (I)-(VIII), where R^1 is selected from among hydrogen, F, Cl, Br, I, NO_2 , OR^{12} , SR^{12} , SOR^{12} , SO_2R^{12} , $NR^{12}R^{13}$, C_1 - C_8 alkyl, C_1 - C_8 haloalkyl and C_1 - C_8 heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; R^2 is selected from among F, Cl, Br, I, CF_3 , CHF_2 , CH_2F , CF_2Cl , CN, CF_2OR^{12} , CH_2OR^{12} , OR^{12} , SR^{12} , SOR^{12} , SO_2R^{12} , $NR^{12}R^{13}$, substituted C_1 - C_8 alkyl, C_1 - C_8 haloalkyl, C_1 - C_8 heteroalkyl, C_2 - C_8 alkenyl and C_2 - C_8 alkynyl, wherein the haloalkyl, heteroalkyl, alkenyl and alkynyl groups are optionally substituted; R^3 through R^8 each independently is selected from among hydrogen, F, Cl, Br, I, OR^{12} , $NR^{12}R^{13}$, SR^{12} , SOR^{12} , SO_2R^{12} , C_1 - C_8 alkyl, C_1 - C_8 haloalkyl, C_1 - C_8 heteroalkyl, C_2 - C_8 alkynyl, C_2 - C_8 alkenyl, aryl, heteroaryl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl, alkynyl, alkenyl, aryl, heteroaryl and arylalkyl groups are optionally substituted; or R^3 and R^5 taken together form a bond; or R^5 and R^7 taken together form a bond; or R^4 and R^6 taken together form a three- to eight-membered saturated or unsaturated carbocyclic or heterocyclic ring, wherein the carbocyclic or heterocyclic ring is optionally substituted; or R^6 and R^8 taken together form a three- to eight-membered saturated or unsaturated carbocyclic or heterocyclic ring, wherein the carbocyclic or heterocyclic ring is optionally substituted; R^9 and R^{10} each independently is selected from among hydrogen, F, Cl, Br, I, CN, OR^{12} , $NR^{12}R^{13}$, $C_m(R^{12})_{2m}OR^{13}$, SR^{12} , SOR^{12} , SO_2R^{12} , $NR^{12}C(O)R^{13}$, C_1 - C_8 alkyl, C_1 - C_8 haloalkyl, C_1 - C_8 heteroalkyl and arylalkyl, wherein the alkyl, haloalkyl, heteroalkyl and arylalkyl groups are optionally substituted; R^{11} is selected from among hydrogen, F, Br, Cl, I, CN, OR^{14} , $NR^{14}R^{13}$ and SR^{14} ; R^{12} and R^{13} each independently is selected from among hydrogen, C_1 - C_8 alkyl, C_1 - C_8 haloalkyl, C_1 - C_8 heteroalkyl, C_2 - C_8 alkenyl, C_2 - C_8 alkynyl, heteroaryl and aryl, wherein the alkyl, haloalkyl, heteroalkyl, alkenyl, alkynyl, heteroaryl and aryl groups are optionally substituted; R^{14} is selected from among hydrogen, C_1 - C_8 alkyl, C_1 - C_8 haloalkyl, C_1 - C_8 heteroalkyl, aryl, heteroaryl, $C(O)R^{15}$, CO_2R^{15} and $C(O)NR^{15}R^{16}$, wherein the alkyl, haloalkyl, heteroalkyl, aryl and heteroaryl groups are optionally substituted; R^{15} and R^{16} each independently is selected from among hydrogen, C_1 - C_8 alkyl, C_1 - C_8 haloalkyl, C_1 - C_8 heteroalkyl, wherein the alkyl, haloalkyl and heteroalkyl groups are optionally substituted; W is O or S; X is $N\{R^{14}\}$;

Y is selected from among O, S, N{R¹²} and N{OR¹²}; Z is N{R¹²}; n is 0; and m is 0 or 1; or a pharmaceutically acceptable salt thereof. Claims 43-51 and 53-62 ultimately depend from claim 42 and are directed to various embodiments thereof.

THE TEACHINGS OF THE CITED ART

Adams *et al.*

Adams *et al.* teaches various pyrroloquinolines as ligands selective for 5-HT_{2B} and/or 5-HT_{2C} receptors for use the treatment of obesity (see page 3 and Examples 3 and 4).

ANALYSIS

Applicant respectfully submits that none of pending claims 1-11, 14-19, 21-38, 42-51 and 53-62 encompass compounds where R² is hydrogen. The Examiner states in the Advisory Action, mailed July 6, 2004, that the deletion of hydrogen as a selection for R² sets a demarcation from the example compound of Adams *et al.* Applicant agrees with the Examiner that the reference does not teach or suggest or provide any motivation to modify the example taught by Adams *et al.* via multiple changes to arrive at the compounds as instantly claimed. Thus, applicant respectfully requests withdrawal of the rejection under 35 U.S.C. §103.

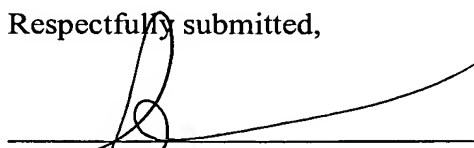
Objection to Claims 40 and 41

The Examiner objects to claims 40 and 41 as allowable subject matter depending from a rejected base claim. Applicant respectfully submits that claim 1 (the base claim) is in condition for allowance. Thus, applicants respectfully request that the objection to claims 40 and 41 be withdrawn.

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In view of the above, examination of the application on the merits and allowance is respectfully requested.

Respectfully submitted,



Stephanie Seidman
Reg. No. 33,779

Attorney Docket No. 18202-017001 (1081)
Address all correspondence to:
Stephanie Seidman
Fish & Richardson P.C.
12390 El Camino Real
San Diego, California 92130
Telephone: (858) 678-5070
Facsimile: (202) 626-7796
email: seidman@fr.com